

CLAIMS

1. Rolling mill (1) for hot rolling metal, especially aluminum, with a hot-strip mill (3) comprising a roughing train (4) and a finish-rolling train (5), wherein the roughing train (4) is designed as a tandem train, in which the rolling stock is rolled in tandem operation with the simultaneous participation of at least two roughing stands (8, 9) installed one after the other; wherein the finish-rolling train (5) comprises as a tandem train at least two finishing stands (11, 12) installed one after the other, with which the rolling stock is rolled in tandem operation with the simultaneous participation of each finishing stand (11, 12); and wherein coilers (15, 14) are installed upstream and downstream, respectively, of the finish-rolling train (5), characterized by the fact that the roughing train (4) operates together with the finishing train (5) as a tandem train, wherein the rolling stock is rolled in tandem operation with the simultaneous participation of the stands of the roughing train and the finishing train.

2. Rolling mill in accordance with Claim 1, characterized by the fact that the roughing tandem train (4) is operated in a reversing mode.

3. Rolling mill in accordance with Claim 1 or Claim 2, characterized by the fact that the roughing tandem train (4) comprises two-high stands (8, 9).

4. Rolling mill in accordance with any of Claims 1 to 3, characterized by the fact that the finishing train (5) is operated in a reversing mode.

5. Rolling mill in accordance with any of Claims 1 to 4 with the following layout:

- furnace region (2) for supplying heat to an initial product before shaping,
- heavy cropping shear (6),
- edging stand (7),
- two roughing stands (8, 9) installed one after the other, which operate in tandem operation in a reversing mode,
- a flying shear (10),
- a first coiler (15),
- two finishing stands (11, 12) installed one after the other, which operate in tandem operation in a reversing mode, and
- a second coiler (14).

6. Method for hot rolling metal, especially aluminum, wherein the initial product, especially an aluminum billet (17), is roughed and then finish rolled in a hot-strip mill (3) with a roughing train (4) and a finish-rolling train (5); wherein the initial product is roughed in the roughing train (4) itself,

which is equipped as a tandem train with at least two roughing stands (8, 9) installed one after the other, in tandem operation with simultaneous participation of each roughing stand; and wherein the roughed rolling stock (19) in the finishing train (5), which is equipped as a tandem train with at least two finishing stands (11, 12) installed one after the other, especially in a rolling mill (1) in accordance with any of Claims 1 to 5, characterized by the fact that the rolling stock is rolled in the roughing train (4) together with the finishing train (5) in tandem operation.

7. Method in accordance with Claim 6, characterized by rolling out the initial product in the roughing stands (8, 9) and running the rolled product into the finishing train (5) with simultaneous participation of all stands of the roughing train (4) and the finishing train (5) (step IIa).

8. Method in accordance with Claim 6 or Claim 7, characterized by rolling out the initial product in the roughing stands (8, 9) and subsequent reversing finish rolling in tandem operation of the finishing train (5).

9. Method in accordance with Claim 8, characterized by the following steps:

- conveyance of a hot initial product (17), especially an aluminum billet, into a tandem roughing train (4),

- reversing roughing with the roughing stands (8, 9) in tandem operation (step I),

-- initial cropping of the roughed product (19), especially the aluminum mill bar, by means of a heavy shear (6),

-- rolling out to a predetermined roughing thickness of the roughed product (19),

-- cropping of the roughed product (19) with a flying shear (10),

-- coiling of the strip (13) that has been run through the finishing train (5), which operates in tandem operation, with a second coiler (14), which is installed downstream of the finishing train (5),

-- reversal of the direction of movement of the rolling stands (11, 12) and drawing the strip (13) back into the finishing train (5),

-- coiling onto a coiler (15) upstream of the finishing train (5) with simultaneous uncoiling from the second coiler (14), and

-- carrying out the rolling step in the finishing train (5) one or more times (step IIb).